

## Frequency Steered Acoustic Transducer, Phase I

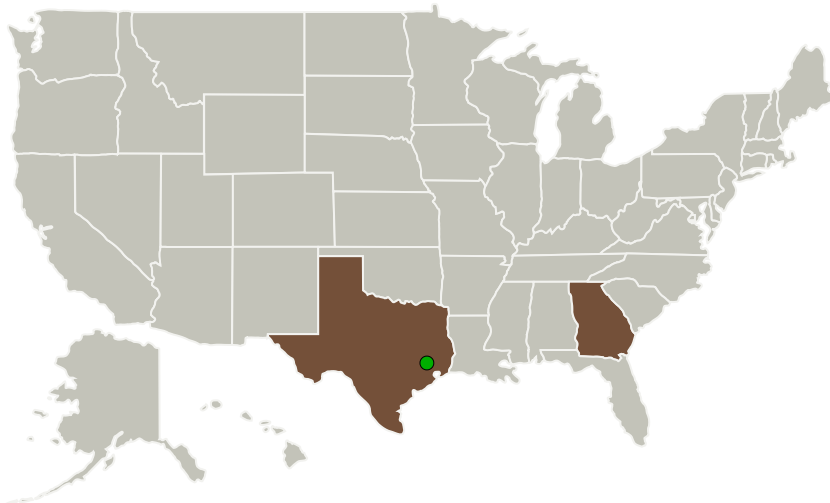
Completed Technology Project (2010 - 2010)



## Project Introduction

This Small Business Innovation Research Phase I project is to develop, fabricate, and characterize a novel frequency steered acoustic transducer (FSAT) for the structural health monitoring of aerospace structures for impacts, damage, and leakage. A single compact, cost effective FSAT is expected to replace high-element-count phase arrays, significantly reducing cost, weight, size, and power requirements for multiple channel data handling, wiring, electronics, and powering. FSAT will allow for permanent continuous leakage detection and localization of simple and complex structures.

## Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
Genziko, Inc.	Lead Organization	Industry	Alpharetta, Georgia
● Johnson Space Center(JSC)	Supporting Organization	NASA Center	Houston, Texas

## Primary U.S. Work Locations

Georgia	Texas
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### Project Transitions



**January 2010:** Project Start



**July 2010:** Closed out

**Closeout Documentation:**

- Final Summary Chart(<https://techport.nasa.gov/file/140099>)

### Organizational Responsibility

**Responsible Mission Directorate:**

Space Technology Mission Directorate (STMD)

**Lead Organization:**

Genziko, Inc.

**Responsible Program:**

Small Business Innovation Research/Small Business Tech Transfer

### Project Management

**Program Director:**

Jason L Kessler

**Program Manager:**

Carlos Torrez

**Principal Investigator:**

Craig D Near

**Co-Investigator:**

Craig Near

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### Technology Maturity (TRL)

Start: **4**  
Current: **5**  
Estimated End: **5**



### Technology Areas

#### Primary:

- TX08 Sensors and Instruments
  - └ TX08.1 Remote Sensing Instruments/Sensors
  - └ TX08.1.5 Lasers

### Target Destinations

The Moon, Mars, Outside the Solar System, The Sun, Earth, Others Inside the Solar System